AMENDED CLAIMS REWRITTEN IN CLEAN FORM:

- 1. (Amended) A method for enhanced magnetic resonance imaging of a target tissue *in vivo* in a patient, the method comprising:
 - (1) administering systemically to the patient,
 - (a) a site-specific ligand; and
- (b) a liquid emulsion having an outer surfactant coating; said ligand being conjugated to said liquid emulsion; wherein upon binding to the target tissue, the ligand-liquid emulsion conjugate enhances magnetic resonance imaging of the target tissue and
- (2) detecting the enhanced magnetic resonance image of the ligand-liquid emulsion conjugate bound to the target tissue.

Please Cancel Claim 4 without prejudice or disclaimer.

- 8. (Amended) A composition for enhancing magnetic resonance imaging of a target tissue *in vivo* in a patient said composition comprising:
 - (a) a site-specific ligary, and
- (b) a liquid fluorocarbonemulsion having an outer surfactant coating; said ligand being conjugated to said liquid emulsion wherein the composition is suitable for systemic administration to a patient and whereby upon imaging the target tissue by magnetic resonance, an enhanced image of the ligand-liquid emulsion conjugate bound to the target tissue can be detected.

Please add Claims 11-19.

- 11. (New) A method as set forth in claim 1 wherein said liquid emulsion is a perfluorocarbon emulsion.
- 12. (New) A method as set forth in claim 1 wherein said liquid emulsion additionally contains a chemotherapeutic agent.
- 13. (New) A method as set forth in claim 8 wherein said liquid emulsion is a perfluorocarbon emulsion.



T. T.

15. (New) A composition for enhancing magnetic resonance imaging of a target tissue in vivo in a patient, said composition comprising:

- (b) a site-specific ligand; and
- (b) a liquid emulsion having an outer surfactant coating and a particle size between approximately 0.05 to 5 microns diameter; said ligand being conjugated to said liquid emulsion wherein the composition is suitable for systemic administration to a patient and whereby upon imaging the target tissue by magnetic resonance, an enhanced image of the ligand-liquid emulsion conjugate bound to the target tissue is detected.
- 16. (New) A composition as set forth in claim 15 wherein said ligand is conjugated to said emulsion through an intervening chemical group.
- 17. (New) A composition as set forth in claim 16 wherein said intervening chemical group is constituted by a hydrocarbon spacer.
- 18. (New) A composition as set forth in claim 15 wherein said liquid emulsion is a perfluorocarbon emulsion.
- 19. (New) A composition as set forth in claim 15 wherein said liquid emulsion additionally contains a chemotherapeutic agent.